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SUMMARY

The Level III building survey at Bluebell House, Dalston recorded a clay dabbins formed from three triangular cruck frames. This action probably occurred during the mid 17th Century to be replaced by a low stone building during the late 17th to early 18th centuries.

By the mid 18th Century, these buildings were surpassed by the continuous-outshut building that became Bluebell House.

Parts of the clay dabbins building were replaced in stone whilst modern windows were inserted to the rear.

The cottage element of the study building possessed a cobbled surface, overlying earthen floors that may be indicative of a barn or accommodation for animals, probably of some antiquity probably and contemporary with the construction of the clay dabbins cottage.

1 INTRODUCTION

1.1 Project origins

Cumbria County Council's Historic Environment Service (CCCHES) was consulted by Carlisle City Council regarding a planning application for the alteration of a single storey cottage adjacent to Bluebell House, Green Lane, Dalston, (NY 38530 49975), Planning Application No. 1/06/1445.

The scheme has the potential to affect the character and appearance of buildings of special architectural and historic interest. The proposal will affect the character and appearance of the buildings and, as a result, a condition has been placed on planning consent requiring a programme of archaeological building recording to be undertaken prior to the conversion taking place

In order to ascertain the historical and archaeological merits affected by this development, the brief issued by the curatorial authority requires investigation of known historical records through a rapid desk-based assessment and the survival of extant buildings via a programme of building recording equivalent to Level 3 as described by English Heritage *Understanding Historic Buildings A Guide to Good Recording Practice, 2006*.

The desk-based assessment included visits to Carlisle Library and The Cumbria Record Office, Carlisle. The objective of this exercise was to collate sufficient detail to identify the issues and potential for academic research, provide a series of questions for targeted archaeological enquiry and outline, if any, possible mitigation response.

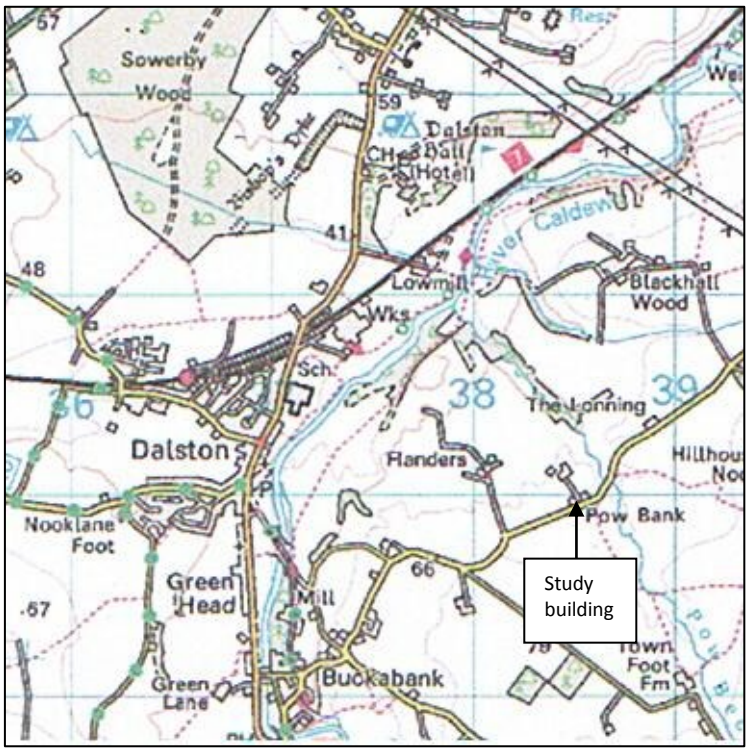

Figure 1. Location of study area
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METHODOLOGY

2.1 Project Design

In response to a request by Cumbria County Council Historic Environment Service, Gerry Martin Associates Ltd submitted a project design (Written Scheme of Investigation) for the archaeological recording of extant buildings. This document outlined the contractors' professional suitability, a brief historical summary of the study area, general objectives required of the project, the methodology and the resources needed for the successful implementation of this work.

The project design on being accepted by the curatorial body, Gerry Martin Associates Ltd was commissioned to undertake the desk-based assessment and the archaeological survey by the client Mr John Sanderson.

The following report has been assembled to the relevant standards and protocols of the Institute of Field Archaeologists, combined with accepted best practice and in accordance with the brief prepared by the curatorial authority.

Fieldwork took place on January 18th 2010.

2.2 Desk-based assessment

In accordance with the Design Brief, the desk-based assessment investigated primary and secondary historical sources, maps and other literature in order to set the survey results into their past cultural, historical and topographic context.

The physical study area centred on (NY 38530 49975) comprising a 500m radius from the proposed development.

The desk-based assessment comprised a search of three archival repositories.

Carlisle Library provided sources for published works including newspaper articles, archaeological and antiquarian reports, photographs and journals.

Cumbria Record Office, Carlisle was sought for the earliest tithe map for the parish, details of landowners and occupiers and cartographic evidence.

The Historic Environment Record, online, provided the Sites and Monuments Record describing previous archaeological observations and electronic media showing the spatial distribution of these findings

2.3 Walk-over survey

A walkover of the immediate vicinity of Bluebell House on January 18th 2010 did not suggest any upstanding monuments such as derelict buildings, walls or tofts existed. The study building was bounded by Bluebell House, a building of probable eighteenth century date to the west, surrounded by gardens to the rear and the front and a rubble dump to the east.

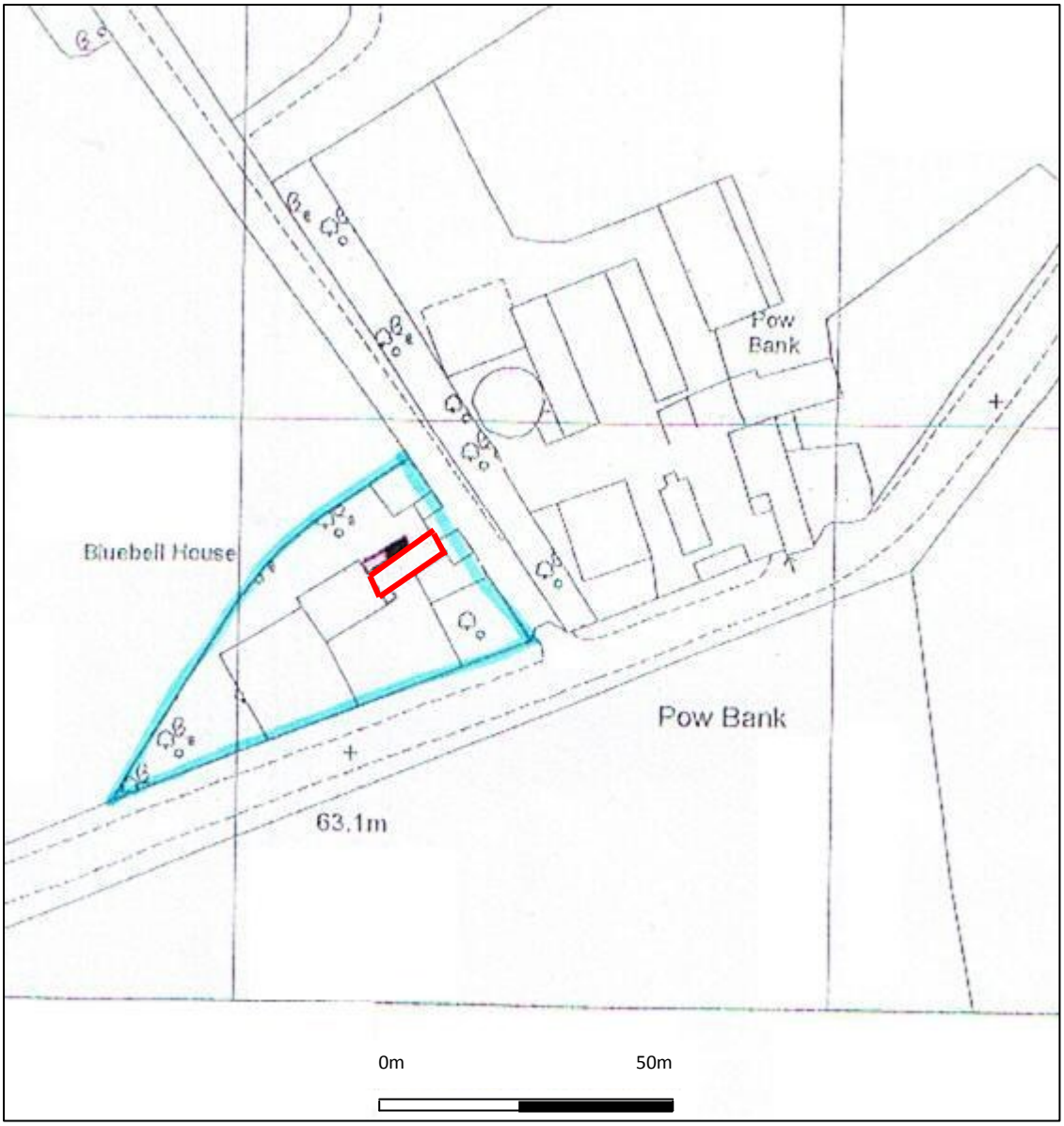

Figure 2. Location of study building in red outline, property in blue outline. Scale 1:1250

2.4 Archive

The archive has been compiled in accordance with the project design and the guidelines set out by English Heritage (1991) and the Institute of Field Archaeologists (1994, 2007 and 2008).

The archive will be deposited with an appropriate repository and a copy of the report donated to the County Sites and Monuments Record, as requested by the curatorial authority.

3 BACKGROUND

3.1 Location, topography and geology

The study area (NY 38530 49975) lies at a height of approximately 63.00m OD on the north side of Green Lane, a road that links the hamlets of Durdar and Bridge End, near Dalston.

The drift geology comprises pink Boulder Clay and yellow sands, the outwash from glacial activity between 2,000,000 and 10,000 years ago.

Solid geology is formed from Old Red Sandstone.

4 HISTORICAL CONTEXT

4.1 Historical background

The present Bluebell House, a Grade II listed building formerly known as Green Lane Cottage, was listed on 9th September 1975 reference 128-1/10/00059. Its entry in the register is described as follows:

House and attached cottage. Late C17 cottage and late C18 house with C19 alterations. Cottage has painted clay walls repaired with red sandstone rubble. Thatched roof at front, corrugated iron to rear; tall brick chimney stack. House: red sandstone random rubble with flush quoins; Welsh slate roof with lower courses of sandstone slates; original brick chimney stacks. Single-storey cottage of 3 bays. Original plank door in wooden surround to right and central plank door with small chamfered stone surround to left. 2-light stone-mullioned window to extreme left. C18 stone porch with sandstone slab roof is main entrance: 6-panel door in stone surround. House: 2 storeys, single bay with 2-storey, single bay extension to right. Entrance to right is blocked with larger sandstone slabs in stone surround. Sash windows with glazing bars in stone surrounds. Prominent central joint in stonework shows left side was built first. Interior of cottage is of full cruck construction. Red sandstone stepped mounting platform to right adjoining cottage.

The present Bluebell House dates from at least the late 18th Century as the extant buildings are illustrated on the Enclosure map of 1803 QRE 1/77 (figure 7). The map describes the property as an "Old Inclosure" but there is no reference to its ownership or provenance on the accompanying parchment nor in the transcription " The Inclosure of the Moors, Commons and Waste Land of Dalston, Cumberland (Wilson, 1898).

The probable ownership of the larger property at Green Lane appears to belong to William Trimble (1763-1841) whose son Robert Trimble (1792-1859) established the Dalston Brewery (Huddleston et al, 1978, 344).

The Trimble family could be bracketed as being from the yeoman or landowning farming section of society, arriving from Ireland in the 18th Century having moved from Argyllshire in order to support Cromwell's Irish campaigns in 1651 (Trimble 1935, 18).

The first edition Ordnance Survey map of 1868 (figure 8) records the present cottage and house as being extant, repeated in the Second Edition Twenty-five Inch Ordnance Survey map of 1900.

The Historic Environment Record maintained by Cumbria County Council does not list any entries in relative close proximity to Bluebell House (500m radius).

Figure 3. 1803 Enclosure Award showing the study building as being extant.

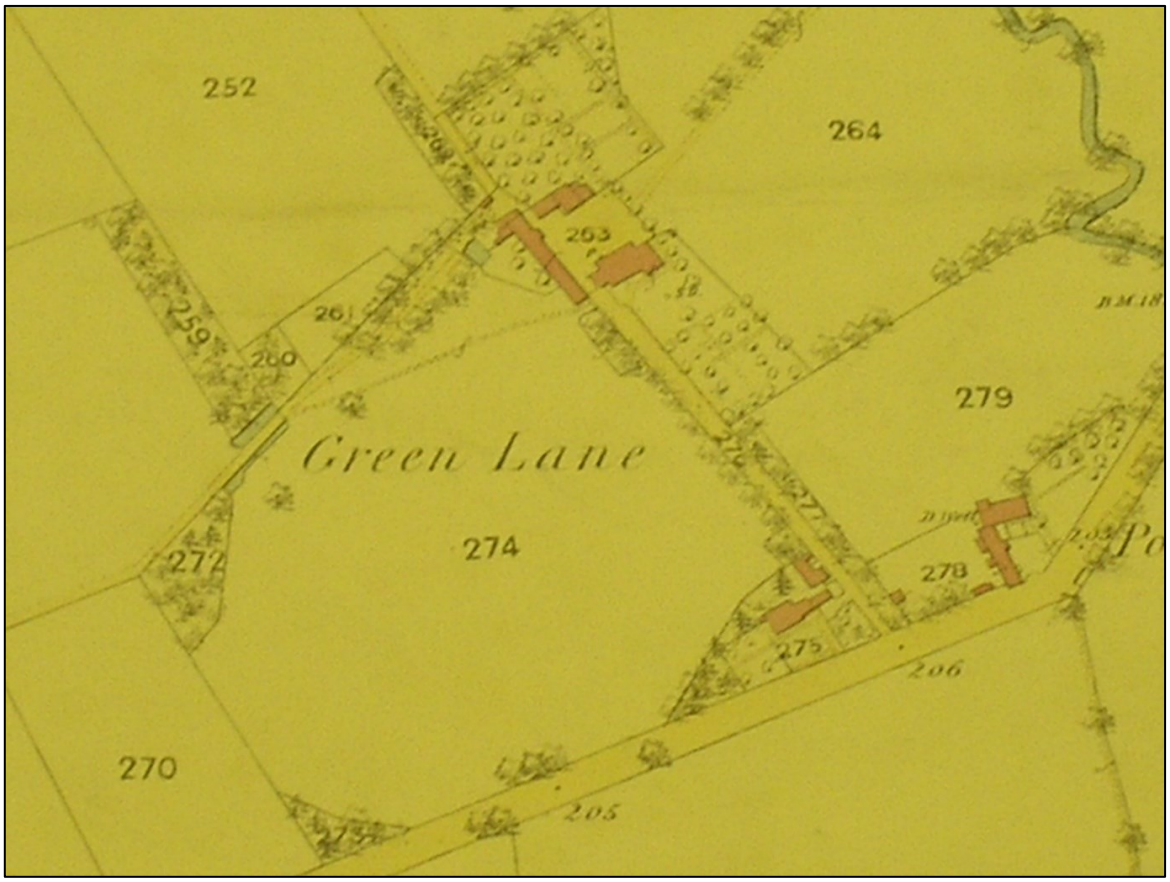

Figure 4. First Edition Ordnance Survey map from 1868

5 DISCUSSION

5.1 Academic merit

Past cultural settlement in Cumbria has been predominantly rural, where farming has been the main economic driver and product. Increasingly, those features associated with past farming technique have been lost or converted for domestic use or for local tourism.

A challenge to historians, archaeologists and other researchers is to compile a record of those rural vernacular buildings that indicate past agricultural practice and social conditions before their industrial, agricultural and social context is lost.

6 RESULTS

6.1 Methodology

The buildings in the study area were surveyed on January 18th 2010 by Gerry Martin using a Disto measuring device and hand-held GPS equipment.

A scale plan of the cottage floor was drawn at 1:20 and relevant notations undertaken.

The buildings were fully accessible although natural light was restricted within the study buildings requiring flash photography.

The survey comprised of scaled photographic recording of the interiors and elevations of all the buildings, with detailed photography of any worthy architectural elements.

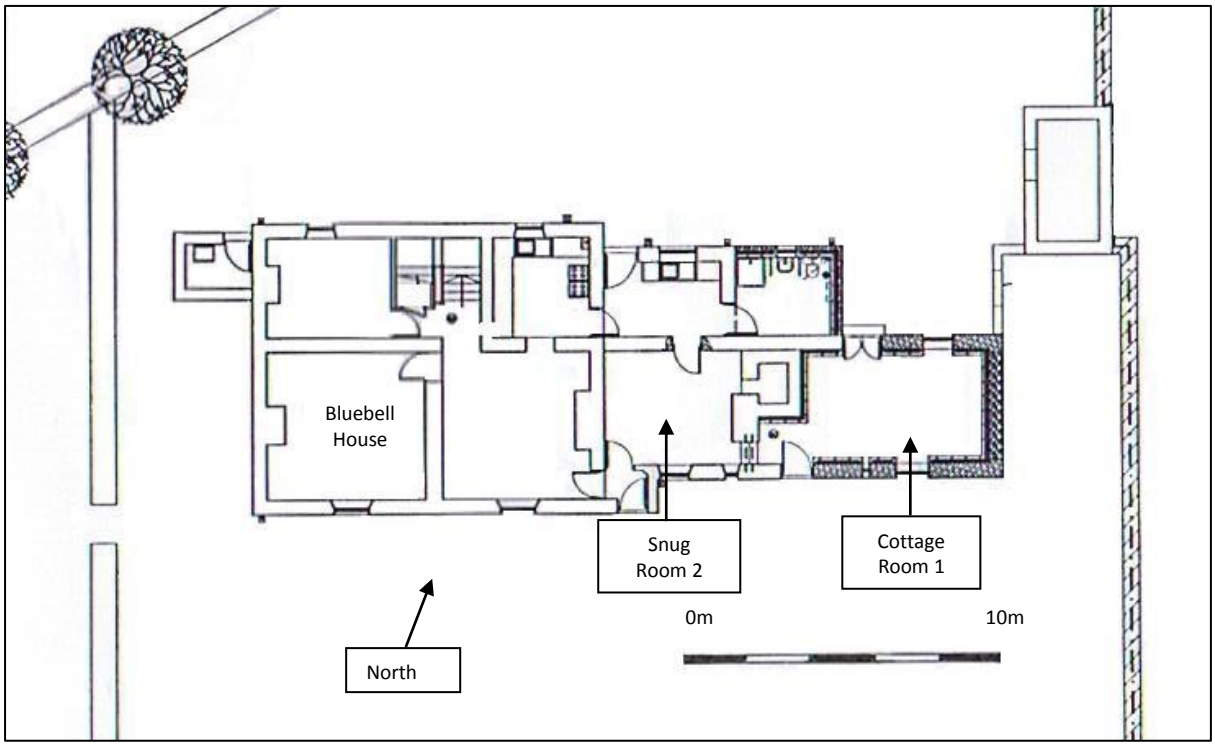

Figure 5. Location of rooms mentioned in the results section

6.2 Survey results; the Cottage (Room 1)

The current cottage comprises a rectangular ground plan 12.40m x 4.45m with a height of 2.20m rising to 4.20m at its apex.

The structure comprised clay walls later replaced with rubblestone walls. Wall thickness for the cottage fluctuated between 0.50-0.60m around the whole structure.

The roof was recently thatched resting above a cruck frame described below.

Southern elevation

The front elevation of the cottage (figure 10) displayed two timber doors measuring 1.80m x 1.00m with timber jambs and lintels. There appeared to be no formal stone jamb, merely that the thresholds had been formalised and dressed. Most probably these thresholds were introduced at a later date, although the doorway at the eastern end of the cottage was an original feature as it corresponded with the stone pathway within the cottage. Early thresholds were normally wooden and it is possible that the original jambs have not survived (Jennings 2003, 110).

Throughout the southern elevation, the cottage was constructed from roughly hewn stone and rubble stone, randomly coursed infilling a cruck frame (figure 7). This stonework replaced an earlier clay dabbins structure that can be observed on the eastern gable elevation (figure 10).

The cruck frame was visible as a timber protrusion standing to a height of 0.90m, resting above a stone padstone comprising of two large, flat stones (figure 9).

A single, small, informal rectangular ventilation slit was visible 0.60m x 0.25m.

Figure 6. Southern elevation of cottage

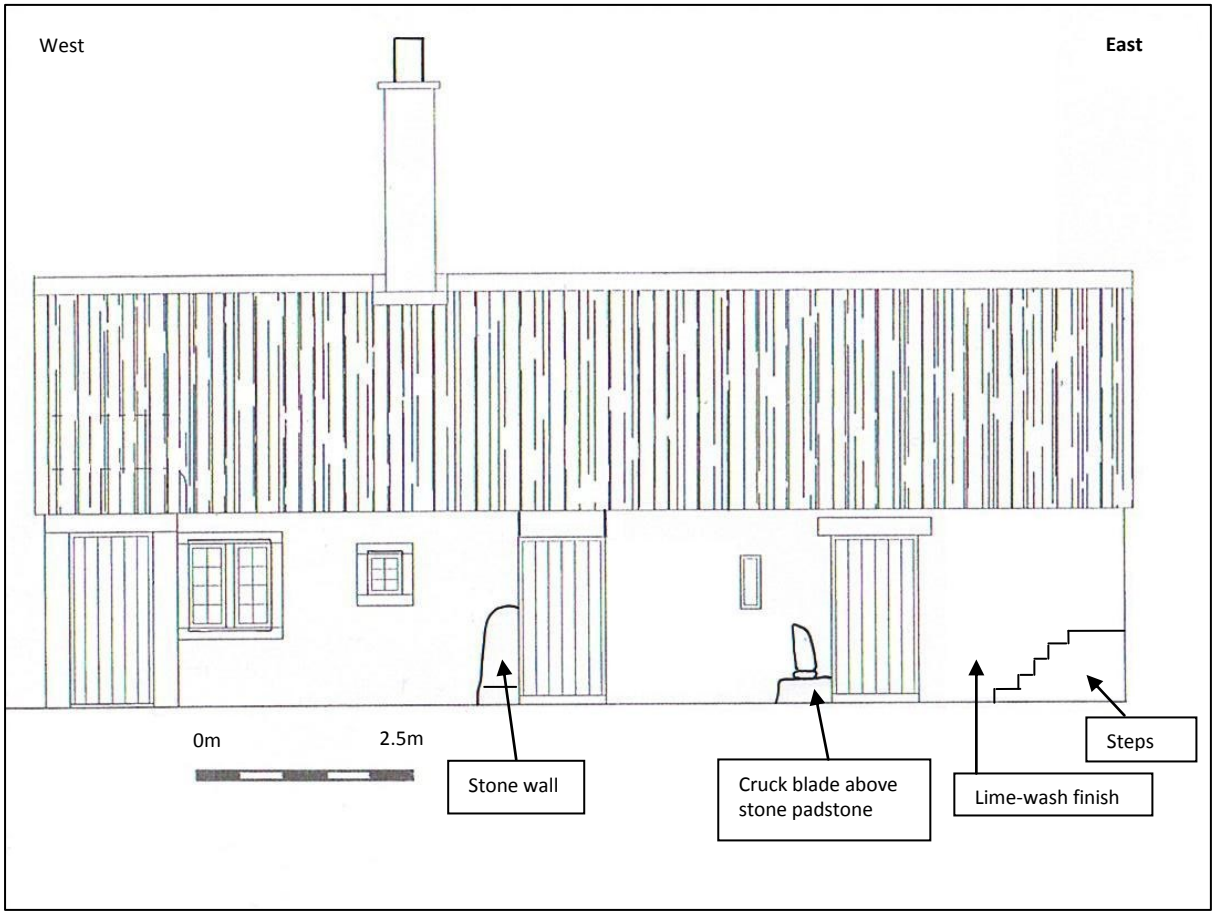

Figure 7. Front elevation of cottage

Butting the elevation were two later features:

- A rectangular plan set of stone steps (figure 8) measuring 1.60m x 0.80m x 1.00m consisting of five steps that we used for mounting horses or loading wagons.
- A red sandstone garden wall at right-angles to the cottage, 1.10m in height and 0.40m in width topped with a set of coping stones

Figure 8. Flight of steps

Figure 9. Cruck blade emerging through the wall

Figure 10. Clay wall, eastern elevation

Eastern elevation

Overgrowth prevented access to the eastern elevation but figure 10 illustrates that this wall was of clay construction, verified by observations taken from within the cottage.

Northern elevation

The northern elevation (figure 11) displayed three construction phases.

1. The earliest phase of wall was a short stub of clay wall (figure 12) 1.35m in length and standing to a height of 2.20m. This elevation illustrated a protruding timber that formed the cruck blade resting above a stone padstone comprising two flat stones (figure 13). No stone plinth for the clay wall was observed.
2. The eastern end of the elevation displayed a randomly coursed rubble-stone sandstone wall approximately 3.50m in length and 2.20m in height with decaying lime cement.
3. Approximately 4.00m of the central part of the elevation appears to have been rebuilt in randomly coursed roughly hewn red sandstone (figure 14). The elevation has been re-pointed and there appears to be a structural interface strongly suggesting this assertion.

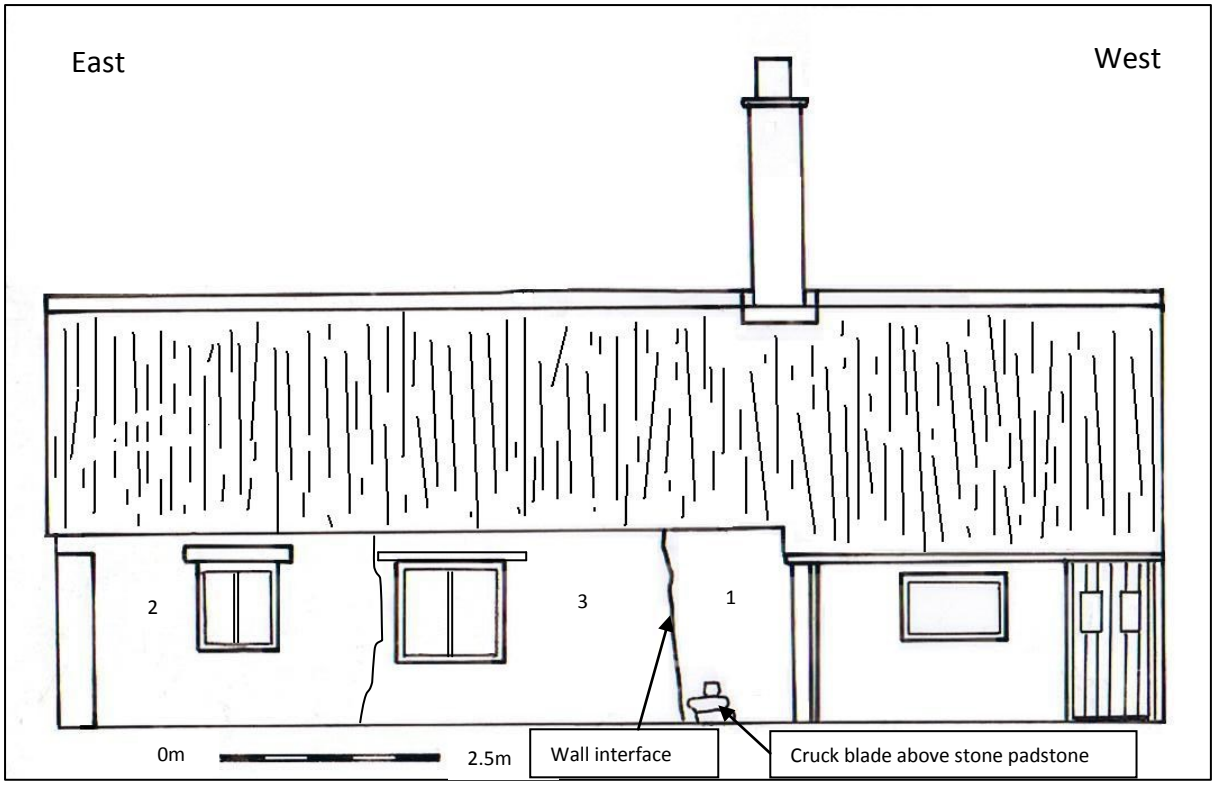

Figure 11. Rear elevation of the cottage

Figure 12. First phase clay wall

Figure 13. Base of cruck blade detail

Two modern double windows (figure 15) were inserted into the phase 2 and 3 stonework. The eastern window measured 1.01m x 0.92m and possessed a stone lintel. The western window measured 1.19m x 1.38m and possessed a timber lintel.

Figure 14. Rear elevation of the cottage

Figure 15. Interface, phase 2 and 3 stonework

Cottage interior

The interior of the original part of the cottage (Room 1) was finished with a white lime-wash or white-wash covering a partial mortar render from which bare stonework frequently protruded.

No architectural embellishments were encountered.

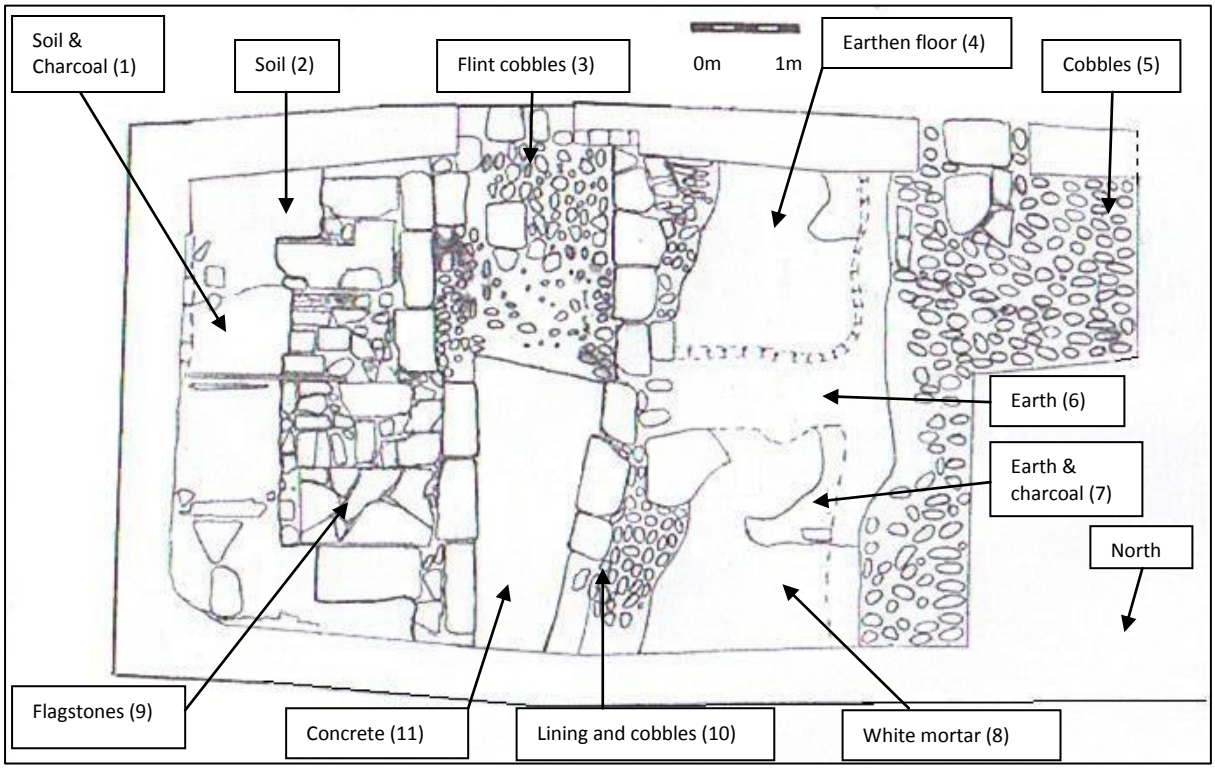

Figure 16. Ground plan of cottage floor

Floor

At the north western corner of the room was a whitewashed brick bread oven that was accessible from the snug (Room 2).

The floor plan (figure 16) appears to illustrate the earliest structural and stratigraphic elements within the cottage (Room 1). This unexcavated sequence may be provisionally summarised as follows:

Earthen floors (Sub-phase 1)

A clean, fine brown clay and silt surface (2) and (6) forming a compacted but rather uneven floor. A second earthen surface (4) overlay surface (6).

Coarse surfaces (Sub-phase 2)

Grey-brown silt and charcoal (1) and (7) appears to be indicative of domestic use that has been trampled into the underlying surface. A creamy mortar (8) overlay surface (7) sealing the crude underlying surfaces.

Cobbled surfaces (Sub-phase 3)

A formal, hard-wearing and concordant surface was installed comprising of the following elements:

- Flagstone surface (9). This comprised large flagstones often broken and filled with smaller flat stones measuring 3.20m x 1.20m
- Pathway (3) and (10). This comprised of two sets of stone flagstones (10) forming kerbs that arced and narrowed towards the northern side of the room. The path was finished with rounded cobbles forming a concordant surface later overlain by concrete (11). The pathway measure 4.00m in length and between 1.10m and 1.60m in width.
- Cobbled surface (5). This consisted of large rounded cobbles set into the underlying surfaces covering an area approximately 3.90m x 3.80m. A central area approximately 3.60m x 1.60m was shorn of cobbles possibly suggesting that they had been grubbed out.

Figure 17. Flagstone surface (9)

Figure 18. Earthen floors (4) and (6)

Walls

The eastern gable end comprised of a clay wall (figure 19) measuring 3.27m in width and 3.88m in height. It comprised of brown clay formed into blocks and laid in courses. Tufts of straw are visible within the fabric (figure 22). A crack was apparent at the midpoint of the elevation.

Figure 19. Clay wall eastern gable end.

Figure 20. Brick western gable end.

Approximately 5.00m of the northern wall of the cottage appeared to survive as clay as well as the eastern gable end (figure 21).

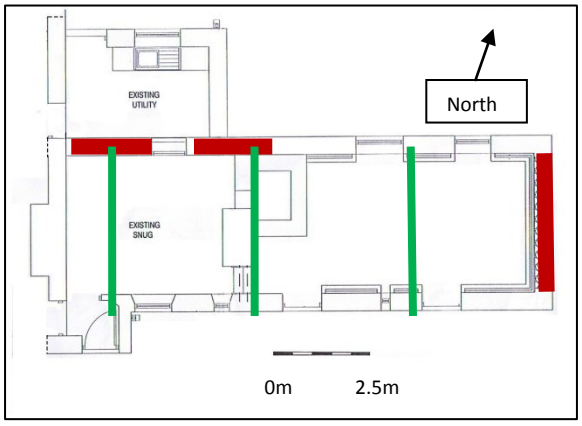

Figure 21. Extant clay walls (brown) and cruck (green)

Figure 22. Detail of clay wall fabric

The snug (Room 2) and the cottage (Room 1) were separated by a brick gable end (figure 20) that enclosed a brick oven and respected a cruck truss.

The cruck construction

Three timber trusses (one visible in the snug, Room 2) were present at approximately 4.00m intervals.

The trusses comprised of timber blades approximately 3.36m in length and 0.24m in thickness. These blades surmounted stone plinths approximately 0.56m above the ground, meeting to form a roof height of 4.09m. The apex of the easternmost truss (figure 23) possessed a halved joint

conforming to Alcock's type D classification whilst the other two trusses (figure 20) corresponded to type H (Jennings 2003, 129). The recess between the two crossing timber blades supported a thick timber ridge beam.

At approximately 2.65-3.00m in height the cruck frame was supported by a horizontal timber tie, bracing the two blades. These connections were secured by wooden dowels. The ledge created by the tie where it passed the blade, supported horizontal timber purlins approximately 0.20m in thickness that carried the roof and its rafters (figure 24). Within the snug, a further tie was applied to the cruck frame (figure 25).

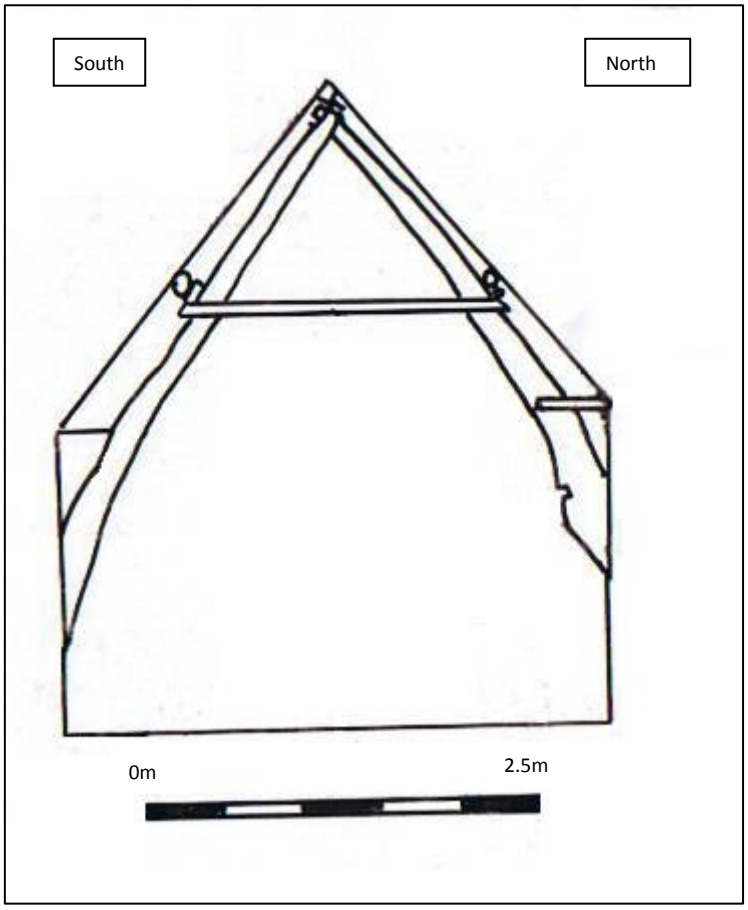

Figure 23. Elevation showing the eastern cruck frame

The cruck frame displayed a variety of grooves and rebates within the blades that suggested either use from a former activity or more probably application of carpentry techniques within the cottage.

The blades of the triangular trusses rested on stone padstones approximately 0.50m of the ground.

6.3 Survey results; the snug (Room 2)

The snug room remains unaffected by the development except where a proposed breach in its eastern wall will provide access into the cottage. However, in order to understand the study area within its full architectural context examination of the snug is beneficial.

The snug rose to a height of 4.09m height, extending the clay constructed building a further 4.66m westwards and slightly narrowing to an internal width of 3.41m.

The northern clay wall was utilised as an internal wall as the building developed into an outshut house.

Figure 24. Eastern roof truss within cottage

Figure 25. Western roof truss within snug

Southern elevation

The southern wall was replaced by a red sandstone frontage (figure 26) beneath a whitewash finish containing two windows and later extended when a stone porch was added.

The western window (the larger of the two) measured 1.10m in width and 1.33m in height and consisted of a red sandstone surround decorated with a narrow rebate divided by a smaller red sandstone mullion with a chamfered finish. Each glazed window (0.39m x 0.92m) comprised an iron glazing bar separating at the centre four columns of small window glass. The panes were 0.10 x 0.16m in size fixed together by lead cames.

The eastern window measured 0.52m in length and 0.60m in height and was also formalised with a red sandstone surround decorated with a narrow rebate. The glazed panes measured 0.09m x 0.15m, fixed by lead cames were arranged in four columns and three rows to produce a window 0.44m in height and 0.37m in width.

Both windows are part of the square window typology that Brunskill attributes to the sub-medieval period, the western window almost identical to Type C figure B (Brunskill 2002, 170-171).

Interior

The interior of the snug (figure 27) contained a number of architectural elements described below:

- A brick bread oven that encroached into the ground plan of the cottage (see figure 5)
- A large stone fireplace with brick hood that has probably been considerably remodelled
- A stone bench seat (1.25m x 0.52m) that may be an original feature
- A recently constructed stone bench seat (0.72m x 0.31m) within a small alcove. This alcove will form the internal access into the cottage.

Figure 26. Front wall belonging to the snug

Figure 27. Fireplace, bread oven and bench seat

6.4 Discussion

The structural sequence clearly demonstrated that the cottage and snug were earlier buildings superseded by Bluebell House.

The earliest element within the cottage and snug (Rooms 1 and 2) was the clay wall construction forming a building at least 14.8m x 4.45m in plan. The original building is now only partially extant namely the eastern gable and parts of the northern elevation, whilst the western gable was removed with the advent of Bluebell House.

The cottage possessed at least three cruck triangular trusses at intervals of approximately four metres resting on padstones that may indicate the timbers had been re-used, the feet sawn off where rot had set in (Brunskill 2002, 146)

There was no direct evidence for any original chimney or hearth although the brick oven and fireplace in the snug may have replaced an earlier feature. The extant brick chimney stack visible outside was of 19th Century date.

The floor plan within the cottage appeared to be of some antiquity possibly contemporary with the clay dabbins but with no direct stratigraphic concordance. This surface would be indicative of a barn or similar farm building or possibly an industrial building such as smith rather than domestic occupation.

The eastern doorway corresponds to a path within the cottage suggesting that it was the original threshold into the cottage. The second doorway is probably a later adaptation.

Unfortunately, it is not possible to discern a spatial arrangement that isolates private, domestic accommodation and ancillary activity although the area that became the snug and Bluebell House is the likeliest location for domestic use. This model would be akin to the longhouse type, the most common form of clay dabbins structure (Jennings 2003, 37).

Dating the cruck structure is difficult as there are few diagnostic features displayed on the timbers, a trait common throughout Cumbria. Although the earliest forms date from 1376-1400, the general date range for this form lies between the 16th and 18th centuries (Brunskill 2002, 151).

This range can be refined as the later stone structures do possess stylistic architectural features.

Cruck-framed buildings were often replaced by stone structures as the former could not accommodate upper stories. The snug with its single square window alongside the single-light "fire window" that lit the inglenook (figure 30) became popular although rooms still retained low ceilings. This activity is ascribed to a sub-medieval period equating to approximately 1550-1700 (Ibid 170), although inertia in taste and innate conservatism could suggest a slight time lag in smaller houses deep into the 18th Century (Breckon & Parker 1996, 118). As the windows were not replaced with timber sash windows a late 17th Century date may be inferred (Brunskill 2002 172).

Verification through documentary sources remain unhelpful. Dalston Hearth Tax returns for 1664 like all hearth tax returns merely lists householders who are liable to the tax; two shillings per hearth on properties worth twenty shillings or more (West 1982, 131), but does not identify the location of the occupants.

Bluebell House illustrates a continuous-outshut house where a double flight of stairs accesses the upper floor via a roofed projection, the Cumbrian dialect for such a feature being a "toofall". This addition allowed greater use of the first floor usually for bedrooms and elevated the height of the ceiling within rooms. This form of house became popular between 1730 and 1820 (Brunskill 2002, 77).

Figure 28. Bluebell House, south elevation

The frontage of Bluebell House (figure 28) although symmetrical has no central doorway, access being via a porch to the side that is a probable late addition, the timber door being a modern reproduction. Access via this route suggests that the original buildings still enjoyed a primary role within the dynamics and operation of the house.

Replacement of the clay wall within the cottage in stone remains unknown though the two rear windows are modern.

7 ARCHIVE

The archive for this project will be deposited with the appropriate archaeological curator, Tullie House, Carlisle. This archive has been assembled in accordance within the protocols of Management of Archaeological Projects (MAP2).

8 ACKNOWLEDGMENTS

I am grateful to Mr John Sanderson for his assistance with the fieldwork and commissioning the work. I would also like to thank Jeremy Parsons for his help and guidance with the archaeological

brief, the staff of Carlisle Library with my research into the local history of the area and the staff of Cumbria Record Office, Carlisle with the map regression and other documentary research.

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APPENDIX A

Development proposals

The proposed development for the cottage entails a change from a defunct agricultural use to a residential purpose.

The current cottage will be renovated with access provided to the existing snug via a breach in the wall, whilst the existing utility room outside will be extended.

The ancient cobbled surface within the cottage will be preserved under a blinding of sand and then covered by a new raised floor.

On completion of the development the building elevations will conform to figure 29-31 and the ground plan will adhere to figure 32.

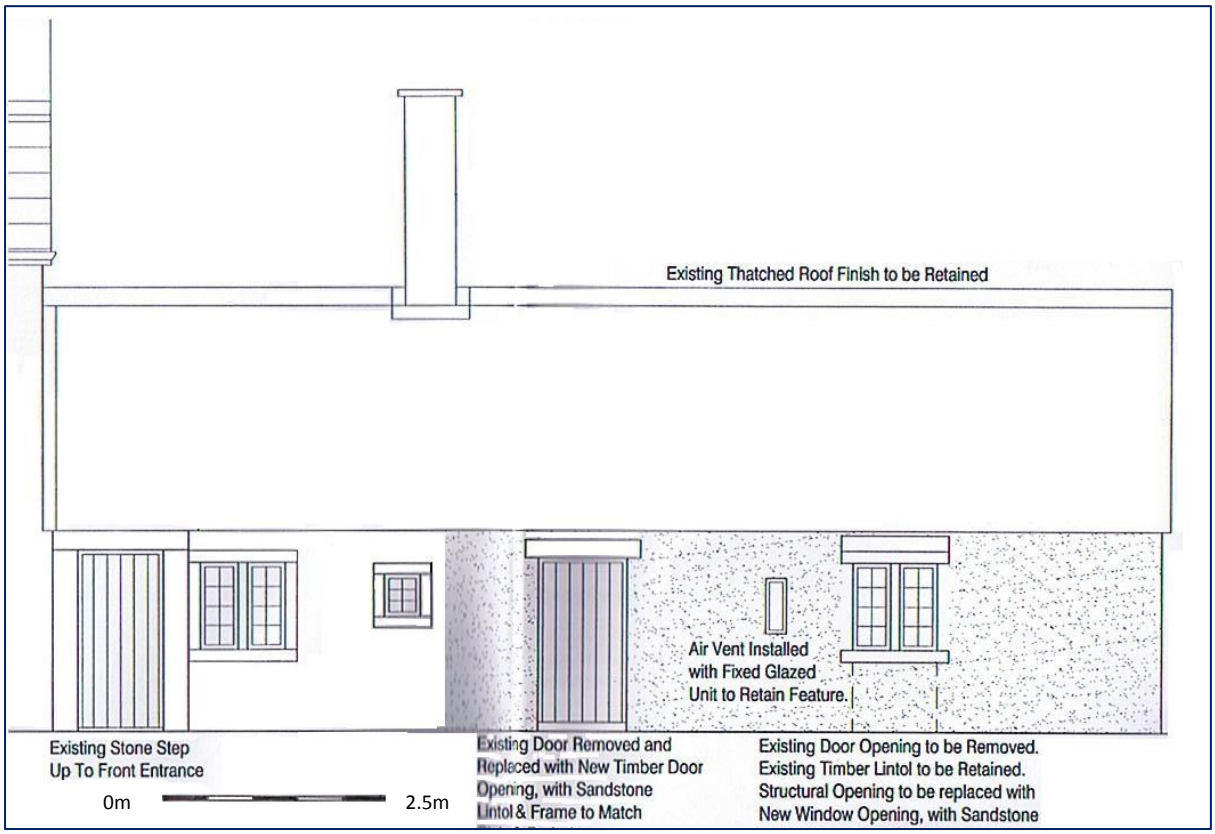

Figure 29. Front elevation of proposed new building featured in the development.

The principal alterations that will affect the south facing elevation (figure 29) are

- Removal of central doorway to be replaced with a new sandstone jamb and lintel and timber door matching the original period features
- Air vent installed with fixed glazing
- Existing door opening to be removed and replaced with a new sandstone sill and lintel and leaded fixed glazed window lights

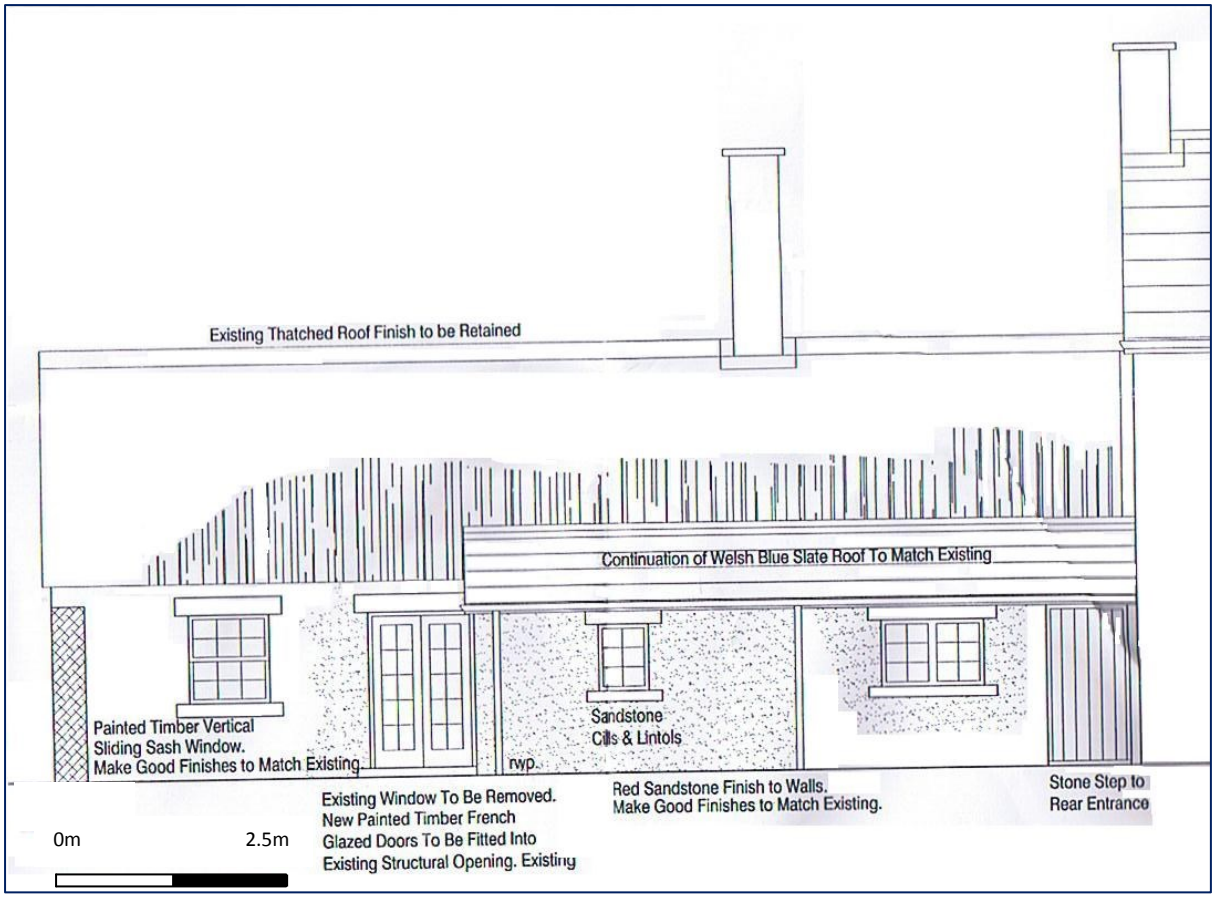

Figure 30. Rear elevation of proposed new building featured in the development.

The principal alterations that will affect the south facing elevation (figure 30) are

- Existing modern casement windows to be replaced with sandstone sills and lintels with timber frames to match period windows
- Existing window to be removed and replaced with timber French glazed doors
- A small extension of the utility room
- Welsh slate roof above the extended utility room

The principal alterations that will affect the gable end elevation (figure 31) are

- Clay dabbins wall to be finished in lime wash render
- Tongue and groove weather boarding above the dabbins wall
- Red sandstone finish to the extended utility room

The principal alterations that will affect the ground plan (figure 32) are

- A new floor protecting the existing surface
- Rendering of the internal walls allowing protection of the dabbins wall
- A new access between the snug and the cottage

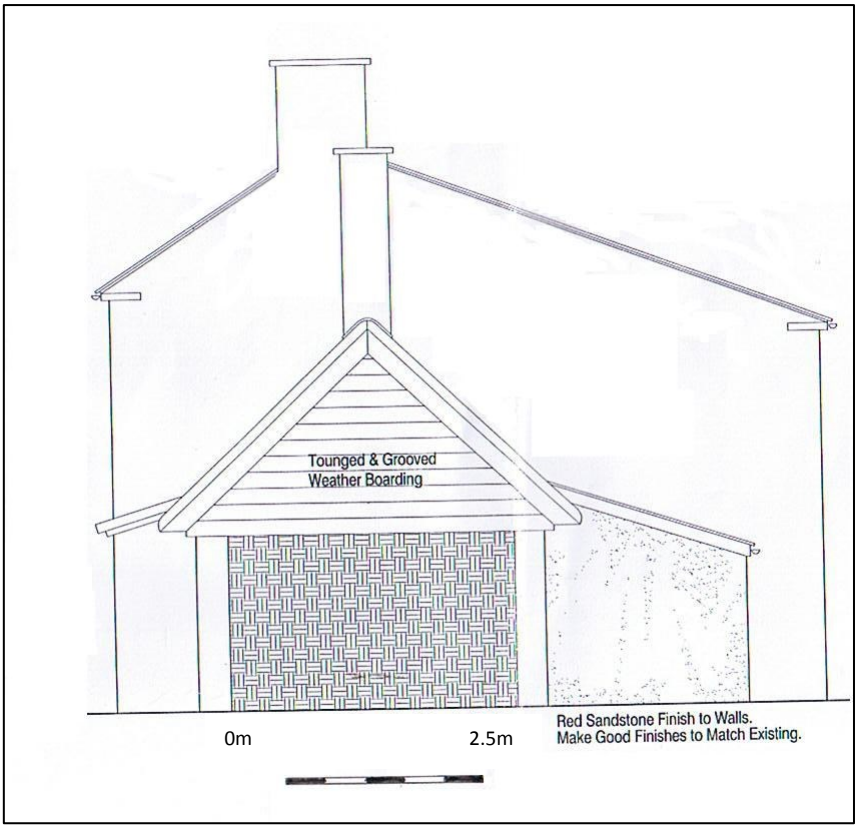

Figure 31. Elevation of gable end showing proposed alterations

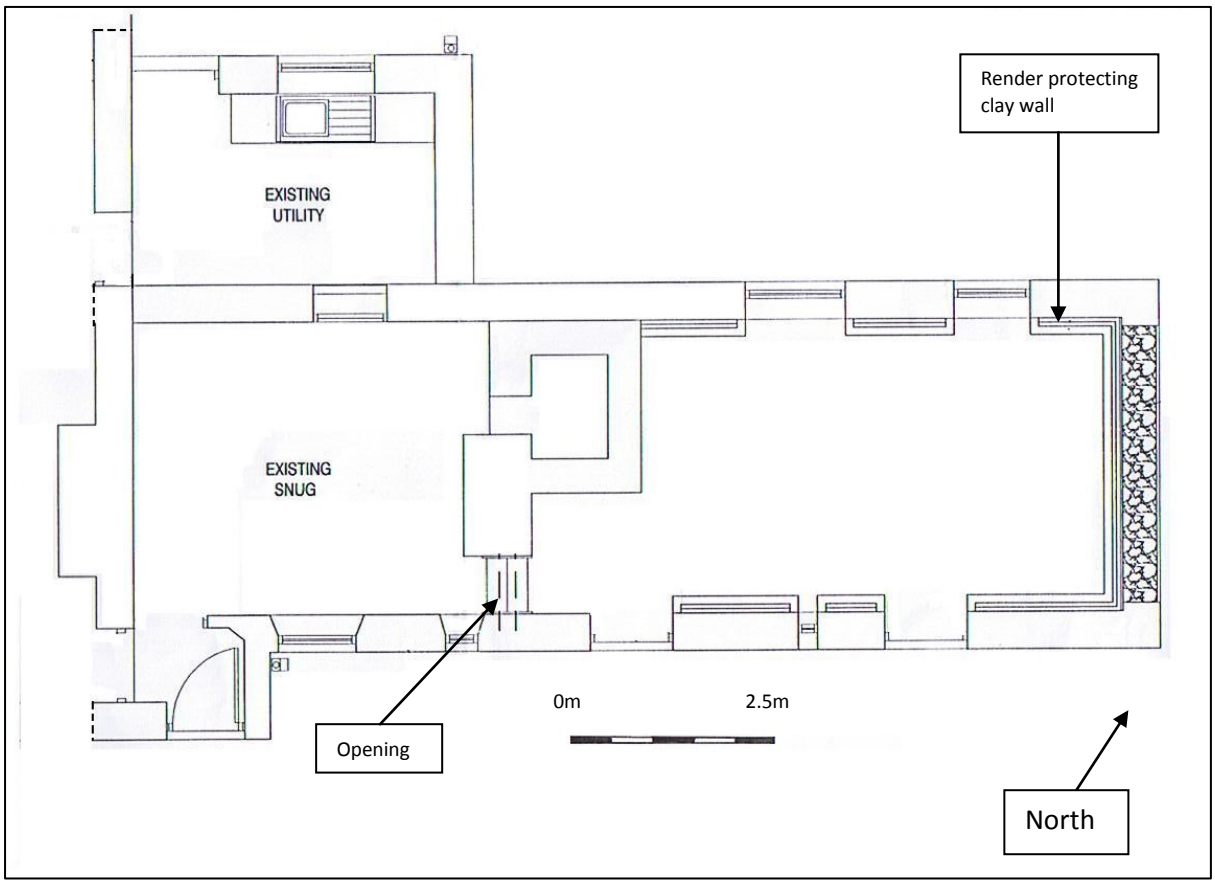

Figure 32. Ground plan of the cottage showing proposed alterations